

Law Offices

105 College Road East
P.O. Box 627
Princeton, NJ
08542-0627

609-716-6500 phone
609-799-7000 fax
www.drinkerbiddle.com

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July 7, 2008

Via Hand Delivery

Mr. Ed Als, Remedial Project Manager
Emergency & Remedial Response Division
USEPA Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866

**Re: Tierra Solutions, Inc.'s Response to CERCLA 104(e) Request for
Information Regarding Standard Chlorine Chemical Co., Inc. Superfund
Site, Kearny, Hudson County, New Jersey**

Dear Mr. Als:

This letter responds to the April 3, 2008 Request for Information (the "USEPA Request" or "Request") propounded by United States Environmental Protection Agency, Region II ("USEPA"), on Tierra Solutions, Inc. ("Tierra"). The USEPA Request seeks information pertaining to the Standard Chlorine Chemical Co., Inc., Superfund site located at Block 287, Lots 48, 49, 50, 51, 52 and 52R as shown on the tax map of the Township of Kearny, Hudson County, New Jersey (the "Standard Chlorine Site" or "Site"). Tierra requested and was granted by Leena Raut, Esquire of the Office of Regional Counsel an extension until July 7, 2008, to provide a response to the USEPA Request.

In the Request, USEPA states that it considers Tierra "to be a potentially responsible party ("PRP") under Section 107(a) of CERCLA, 42 U.S.C. §9607(a)" and that USEPA "believes that Tierra may be liable as a current owner of the Site, and as a person who operated the Site at the time that hazardous substances were [sic] disposed of there, and/or who arranged for disposal, or arranged with a transporter for disposal, at the Site of hazardous substances owned by Tierra."

Contrary to USEPA's assertions, Tierra is not a current or former owner or operator of the Standard Chlorine Site, and never arranged for disposal of hazardous substances at the Standard Chlorine Site. Rather, Tierra is the current owner of the property identified in the USEPA Request as the "Diamond Shamrock Site" adjacent to the Standard Chlorine Site and located at Block 287, Lots 46 and 47 as shown on the tax map of the Township of Kearny, Hudson County, New Jersey (the "Diamond Site"). Although the current owner of the Diamond Site, Tierra took ownership of the Diamond Site long after manufacturing operations ceased there. Moreover, Tierra is not the corporate successor to any of the entities that previously operated at the Diamond Site. Indeed, Tierra only first came into existence in 1986, a decade after the last

Jonathan I. Epstein,
Partner responsible for
Princeton Office

Established 1849



remnants of manufacturing had ceased at the Diamond Site and several years after the plant itself was razed. Thus, Tierra has no connection to any operations at the Diamond Site that USEPA might believe may have resulted in disposal of hazardous substances at the Standard Chlorine Site.

To help USEPA better understand Tierra's position, and to provide USEPA with an appropriate context for the information provided in the responses to the specific questions in the Request, there is significant historical background that needs to be understood. Among other matters, it will be useful for USEPA to have a better understanding of the ownership and operational history of the Diamond Site, which is next door to the Standard Chlorine Site, Tierra's own corporate history, and the long history of cooperation among Tierra, the New Jersey Department of Environmental Protection ("NJDEP") and the successor to the former Diamond Site operators to investigate and remediate the Diamond Site and in participation with others the Standard Chlorine Site.

BACKGROUND

A. Ownership and Operational History of the Diamond Site and the Corporate History of the Diamond Site Operator

As set forth more fully in response to question no. 6 below, manufacturing operations at the Diamond Site involved the production of sodium bichromate, which was the primary product produced at the Diamond Site, along with other chromium products and chemicals. Sodium bichromate production resulted in generation of a material known as chromite ore processing residue ("COPR"). The Diamond Site is one of three plants located in Hudson County, New Jersey, that are known to have engaged in manufacturing operations that resulted in the production of COPR. COPR from these three plants generally had a soil-like consistency and as such was used as fill material. Production of sodium bichromate at the Diamond Site began in 1916 and ceased in 1971. All other manufacturing operations at the Diamond Site ceased in 1976, and most of the buildings on the property were demolished by 1978.

The Martin Dennis Company operated the Diamond Site from approximately 1916 to 1949. In or around 1949, the Diamond Alkali Company acquired the stock and assets of The Martin Dennis Company from Prior Chemical Corporation (which had previously acquired Martin Dennis' stock in or around 1947). Diamond Alkali Company changed its name to Diamond Shamrock Corporation ("DSC-1") in or around 1967, and later DSC-1 changed its name to Diamond Shamrock Chemicals Company ("DSCC"). In or around July 1983, long after production at the Diamond Site ceased, a new company, New Diamond Corporation, was formed, which company acquired all of the stock of DSCC. New Diamond Corporation changed its name to Diamond Shamrock Corporation

("DSC-2"), and DSC-2 subsequently changed its name to Maxus Energy Corporation ("Maxus").

Tierra was incorporated in March 1986 as Diamond Shamrock Chemical Land Holdings, Inc. ("DSCLH"), an indirect Maxus subsidiary. In August 1986, DSCC, which had by then become a Maxus subsidiary, transferred title to the Diamond Site to DSCLH. In September 1986, Maxus sold the stock of DSCC to Oxy-Diamond Alkali Corporation, a wholly-owned indirect subsidiary of Occidental Petroleum Corporation ("OPC"). DSCC was renamed to Occidental Electrochemicals Corporation, which eventually merged in November 1987 into Occidental Chemical Corporation ("OCC"), another indirect, wholly-owned subsidiary of OPC.

As a result of these transactions, OCC became the corporate successor to DSCC, the former operator of the Diamond Site, while title to the Diamond Site was vested in DSCLH. Through a series of name changes, DSCLH became Chemical Land Holdings, Inc., and then Tierra Solutions, Inc.

Accordingly, while Tierra is the current owner of the Diamond Site, it is not the corporate successor to the operator of the Diamond Site (DSCC). Further, Tierra never owned the Diamond Site during its period of operation. Rather, when Tierra (then DSCLH) took title to the Diamond Site in August 1986, no operations were being conducted there.

B. Understanding Tierra's Role at the Diamond Site

On April 2, 1986, prior to Maxus's transfer of ownership of the stock of DSCC to Oxy-Diamond Alkali Corporation, DSCC entered into an Administrative Consent Order with the NJDEP (the "1986 ACO") to investigate the presence of "chromium residue" at various locations throughout Hudson County (the "COPR Sites"), which "chromium residue" NJDEP alleged originated at the Diamond Site, among other properties in Hudson County owned by unrelated entities where production processes also resulted in generation of COPR.¹ As part of the 1986 ACO, DSCC agreed to fund one-third of the cost of NJDEP's implementation of a Remedial Investigation/Feasibility Study ("RI/FS") at the then-known COPR Sites. NJDEP intended to seek the other two-thirds from entities responsible for the two other Hudson County COPR-generating facilities. All of the obligations under the 1986 ACO have been satisfied. When Maxus sold the DSCC stock to Oxy-Diamond Alkali Corporation (which subsequently merged with OCC),

¹ A copy of the 1986 ACO is contained in the accompanying Appendix to the Responses of Tierra Solutions, Inc. and Occidental Chemical Corporation to the USEPA's April 3, 2008 CERCLA 104(e) Request for Information Regarding Standard Chlorine Chemical Co., Inc. Superfund Site (the "Appendix"), at Exh. A.

Maxus agreed to indemnify OCC for certain matters allegedly arising out of prior operations at the Diamond Site, including matters related to the Standard Chlorine Site that is the subject of the Request.

As work proceeded under the 1986 ACO (which work has since been completed), NJDEP continued to identify COPR Sites in Hudson County, and both Tierra and OCC (by and through Maxus) began negotiations to resolve DSCC's potential liability for investigation and remediation at certain of the then known COPR Sites. Consequently, on April 17, 1990 OCC and Tierra (then known as Chemical Land Holdings, Inc.) entered into a new Administrative Consent Order (the "1990 ACO") to investigate and remediate the alleged existence of COPR at some 26 Sites (the "1990 ACO Sites").² Among the sites identified in the 1986 ACO and the 1990 ACO was the Standard Chlorine Site, which was identified as site no. 116. Obligations under the 1990 ACO that apply expressly to Tierra are limited to certain specific matters directed solely to the Diamond Site in connection with Tierra's ownership of that property. Investigation and remediation of the other 1990 ACO Sites, including the Standard Chlorine Site, proceeded historically under the direction of Maxus acting on OCC's behalf. As part of a subsequent corporate reorganization in 1996 the parent-subsidary relationship between Maxus and Tierra ended and Maxus and Tierra entered into a separate agreement between them by which Tierra took oversight of Maxus's historical indemnity obligations to OCC in connection with the 1990 ACO.

Separate and apart from the 1990 ACO that addresses COPR at the Standard Chlorine Site, the Standard Chlorine Chemical Company ("SCCC") entered its own ACO with NJDEP (the "SCCC ACO"). Likewise, Beazer East, Inc., the owner of yet another site (the "Koppers Site) also abutting the Standard Chlorine Site (and the successor to a former owner of the Standard Chlorine Site itself) has been pursuing remediation of its site under a separate oversight document with NJDEP. Given the proximity of the three Sites, it became clear to those involved in remedial efforts that there were benefits and efficiencies to be realized by trying, as much as possible, to coordinate remedial efforts, including the remediation of the Standard Chlorine Site under the 1990 ACO. Consequently, in 2003 Tierra, on its own behalf and on behalf of OCC, entered into an agreement with Beazer East, Inc., and SCCC to form a group known as the Peninsula Restoration Group (the "PRG"). The PRG's agreement is contained in a Declaration of Covenants, Restrictions, Conditions and Obligations dated November 19, 2003, which Declaration was recorded by the Hudson County Register of Deeds in Deed Book 07177,

² See Appendix, Exh. B. Additional sites have been added to the sites included under the 1990 ACO, which now total approximately 40 properties, all of which have been the subject of some remedial action and nearly half of which have been completed.

Page 00061, et seq.³ Under their Agreement, the PRG agreed jointly to fund (subject to reallocation) a certain remedial action plan that the PRG was developing for NJDEP approval under the SCCC ACO. Components of the remedial action would extend to the neighboring Diamond Site under the 1990 ACO and also help coordinate with SCCC's then pending plans to sell its property to a developer. Intervening events have altered that effort to some extent. NJDEP's position on certain issues has led to a restructuring of the remedial approach such that components of the remedy that could be implemented without the need for further work or delay were presented separately as part of an Interim Response Action Work Plan (the "IRAW") that NJDEP has effectively approved. See Appendix, Exh. E. Pending that approval, the Standard Chlorine Site was listed on the National Priorities List ("NPL"), and USEPA became involved in remedial efforts at the property. Through continued cooperation with USEPA and NJDEP, the PRG are working to follow USEPA procedures to allow the IRAW to be implemented as a non-time critical removal action.

C. The Extent of Environmental Contamination at the Diamond Site and Standard Chlorine Site Has Been the Subject of Extensive Investigation

While neither Tierra nor Maxus has any direct knowledge of the activities at the Diamond Site that may have resulted in contamination at the Standard Chlorine Site, Tierra, on its own behalf with respect to the Diamond Site and later for Maxus on behalf of OCC, has been performing the investigation and remediation under the existing ACO. During the course of and as a consequence of its environmental response actions at the Diamond Site and the Standard Chlorine Site, Tierra has acquired and compiled documents relating to the operations at the Diamond Site, some of which may be relevant to the inquiries in the Request. At the same time, the absence of direct personal knowledge regarding historic operations and the significant passage of time since both the start and cessation of operations at the Diamond Site make it burdensome and in some cases impossible to respond to USEPA's Request at the level of detail sought by the Request. Notwithstanding this fact, certain documents that have been collected over time do aid in understanding historic operations at the Diamond Site and have been identified to the extent potentially relevant. More importantly, however, is that Tierra for many years has been aware of and/or participated in a variety of remedial activities such that the extent of contamination and areas of concern at both the Diamond Site and the Standard Chlorine Site have been thoroughly investigated, identified and in some measure addressed, with remedial efforts continuing.

³ In addition to the Appendix, three (3) boxes of materials are being provided in response to the USEPA Request. The Declaration is contained in Box 2 of 3. The location of other documents contained in the boxes to which Tierra refers herein will be indicated by a reference to "Box __ of 3."

In other words, given the extensive remedial activities in which Tierra has participated at the Diamond Site and the Standard Chlorine Site, information relating to the nature of contamination at either site has already been gathered and has been used to direct the remedial response at the properties. Further, extensive testing has identified the areas of concern at the Diamond Site and the Standard Chlorine Site.⁴ Thus, to the extent USEPA's Request seeks information regarding detailed incidents that might identify potential contamination and/or sources of contamination, while specific information responsive to those inquiries may be unavailable, the investigative reports and other documents that are being provided with this response can provide USEPA not only with a composite of information relating to the specific topics of interest raised in the USEPA Request, but can also provide information that will allow USEPA to identify the areas of concern and sources of contamination at the Diamond Site or the Standard Chlorine Site without the need to reconstruct the history of activities conducted at the Diamond Site that began nearly a century ago and ceased more than 30 years ago.

Enclosed with this response is a copy of the background sections of the 1992 Remedial Investigation Work Plan for the Diamond Site (the "Diamond RIWP") and the Remedial Investigation Work Plan for the Standard Chlorine Site (the "Standard Chlorine RIWP"). See Appendix, Exhs. C & D. These documents explain, based on historical documents and other available information, the then-known sources and extent of contamination at the Diamond Site and the Standard Chlorine Site. Even more relevant to the USEPA Request are the investigative reports that were created under NJDEP oversight in connection with the environmental response activities taken by Tierra or Maxus on behalf of OCC pursuant to the 1990 ACO at the Diamond Site and the Standard Chlorine Site or by the PRG pursuant to its agreement. Such reports include the following:

- November 2000 Remedial Investigation Report for the Diamond Site;
- April 2001 Revised Remedial Investigation Report for the Diamond Site;
- July 2001 Addendum to Volume IIA of the Remedial Investigation Work Plan for the Standard Chlorine Site;
- May 2003 Interim Remedial Measure Work Plan for the Standard Chlorine Site;

⁴ As to the current status of remedial efforts at the two properties, a revised remedial investigation report for the Diamond Site, incorporating NJDEP comments, has been issued (see Box 2 of 3), while a remedial investigation work plan proposing additional sampling has been issued for the Standard Chlorine Site. See Box 1 of 3.

- March 2006 Supplemental Remedial Investigation Work Plan for the Diamond Site;
- July 20, 2006 Addendum to the Remedial Investigation Work Plan for the Standard Chlorine Site;
- October 2006 Interim Remedial Measures Work Plan for Stormwater Pipe at NJDEP Site No. 113;
- November 10, 2006 Response to USEPA Comments to PRG Request to Use USEPA AOC Policy in Implementation of Interim Response Actions at the Standard Chlorine Site and the Diamond Site;
- May 2007 Interim Response Action Workplan, Standard Chlorine Site & Diamond Site (this Work Plan is available on CD-ROM, a copy of which is being provided in lieu of a hard copy for your convenience – see Appendix, Exh. E);
- June 2007 Hackensack River Study Area Remedial Investigation Report (also available on CD-ROM – see Appendix, Exh. F);
- November 16, 2007 Interim Response Action Work Plan Addendum;
- March 2008 Phase II Supplemental Remedial Investigation Work Plan for the Standard Chlorine Site;
- April 2008 Site-Specific Sampling & Analysis Plan for Containerized Materials, Standard Chlorine Site; and
- June 2008 Revised Remedial Investigation Report for the Diamond Site.

Hard copies of these documents, including all accompanying appendices (other than those noted above that are provided on CD-ROM), are provided with this response to the USEPA Request. See Box 1 of 3 & Box 2 of 3. Copies of other documents responsive to specific requests below are also provided.

Not included with this response, but available for inspection upon request, are the data packages from sampling performed in connection with the above-referenced reports, along with additional materials pertaining to work under the 1990 ACO at the Diamond Site and the Standard Chlorine Site that are either redundant or are not responsive to the specific requests below, and which were not relied upon in preparing the response to the USEPA Request. For your convenience, a general index containing a description of these archived documents is enclosed (the "Index"). See Appendix, Exh. G. Similarly, in

connection with the potential sale of the Diamond Site, 19 boxes of "due diligence" materials, primarily comprised of data packages for environmental testing at the Diamond Site that are in part duplicative of the documents relating to the Diamond Site described on the Index are not included but have been compiled and are available for inspection upon request. An index of the due diligence materials is also enclosed. See Appendix, Exh. H.

OBJECTIONS

Tierra has been engaged in cooperative efforts relating to the Diamond Site and Standard Chlorine Site for many years. The detail provided above evidences Tierra's cooperation in responding to USEPA's current inquiry. However, given the broad scope of the USEPA Request, before Tierra is able to respond to the individual questions it is compelled to raise objections, both general and specific, to the inquiries contained in the Request. Please note that Tierra does not raise objections in order to avoid response, as all relevant available information is being provided. Rather, Tierra seeks to clarify its position regarding demands that are overly broad and burdensome, where that burden is not reasonably calculated to lead to pertinent or responsive information regarding the Diamond Site or Standard Chlorine Site.

Accordingly, Tierra asserts the following objections to the USEPA Request. To the extent Tierra responds to the questions to which it objects, such objections are not waived by the furnishing or providing of information.

GENERAL OBJECTIONS

As an initial matter, Tierra objects to the temporal scope of the USEPA Request as overbroad, burdensome and vexatious, given the time period during which the Diamond Site operated—from approximately 1916 until approximately 1976. The questions in the USEPA Request are not restricted to alleged releases of hazardous substances and/or materials that occurred during this relevant time period, and indeed extend to periods during which remedial measures were being implemented at one or both of the Sites. Accordingly, because there is no reasonable basis to believe that there were any activities being conducted at the Diamond Site that potentially could have resulted in the release of hazardous substances outside the period of 1916 until 1976, Tierra will construe as the relevant time period for the USEPA Request the period of 1916 until 1976, unless otherwise noted.

Tierra further objects because the USEPA Request seeks information regarding activities at a level of detail that is impossible to provide without extreme burden and oppression, if at all. The activities that are the subject of the USEPA Request took place or may have taken place as long as ninety-two (92) years ago. Many persons who may

have had limited knowledge regarding some of the activities to which this Request refers are deceased or are no longer employed by the entities that succeeded the operators of the Diamond Site, and, even if they were so employed, could not reasonably be expected to have knowledge at the level of detail requested. In any event, none of those persons are employed currently by Tierra. To the extent relevant documents responsive to the questions below ever existed, aside from those produced or referenced herein, it is possible they may have been destroyed pursuant to document retention policies of the custodians of such documents, all of which preceded Tierra's ownership of the Diamond Site. In providing responses to the USEPA Request, Tierra has nonetheless attempted to set forth relevant answers to the best of its knowledge, information and belief based upon information in Tierra's possession, custody and control, information developed through current and former employees, and information from other sources as described herein.

Tierra further objects to the USEPA Request to the extent it seeks information protected from disclosure by the attorney-client privilege, the attorney work product doctrine and/or any other legally cognizable privilege.

Tierra further objects to the USEPA Request to the extent that it seeks information or documents in the possession, custody, and/or control of any local, state, or federal governmental authority, or is a matter of public record. The burden of obtaining such information is substantially the same (or less) for USEPA as it is for Tierra. Nonetheless, Tierra encloses and/or makes available to USEPA certain of those documents and provides information that Tierra believes is relevant to the USEPA Request.

Tierra also objects to the USEPA Request to the extent that it seeks information outside of Tierra's possession, custody, and/or control.

Finally, Tierra objects to the USEPA Request to the extent it exceeds the scope of USEPA's authority granted under CERCLA Section 104(e). For example, and without limitation, to the extent that the USEPA Request seeks information not related to the hazardous substances that are alleged to be connected with the Diamond Site, and seeks information pertaining to Tierra's corporate "family" relating to entities without any connection to the Diamond Site, the USEPA Request is overly broad and exceeds USEPA's authority under Section 104(e). The USEPA request also is overbroad and exceeds USEPA's authority under Section 104(e) to the extent it seeks a certification or affidavit as to the responses to the within inquiries.

OBJECTIONS TO DIRECTIONS AND DEFINITIONS

Tierra objects to Direction nos. 3 and 5 as overbroad and unduly burdensome, as many of the documents being produced in response to USEPA's request are generally applicable to the environmental condition and/or history of the properties at issue. As a result, while Tierra will make a good faith effort to direct USEPA's attention to specific documents in its responses to individual questions below, certain documents will not be affiliated with specific questions.

Tierra objects to the definition of "Company" as overbroad and unduly burdensome, in that it requests information regarding successors that are not in existence as Tierra is a presently-operating entity, and also requests information regarding affiliates of Tierra, which term is undefined, and which indicates that USEPA is seeking information on a broad range of companies that have no connection with the Diamond Site or the Standard Chlorine Site, and which would therefore be irrelevant to USEPA's Request. Tierra therefore construes the term "company" to refer to Tierra Solutions, Inc., as that entity was legally constituted upon its incorporation and continuing to the present.

Tierra objects to the definition of "industrial waste material" as overbroad, vague and ambiguous, and outside the scope of USEPA's authority under CERCLA. While Tierra will make a good faith effort to respond to the requests seeking information regarding "industrial waste material", given the broad scope of the definition USEPA provides, Tierra cannot reasonably be expected to identify any and all such material that falls within the USEPA's definition. For example, paper products could be considered "industrial waste material" under USEPA's definition.

Tierra objects to the definition of "material" as overbroad, given the history of operations at the Diamond Site that Tierra now owns. Tierra cannot reasonably be expected to identify all objects, goods, substances, or matter of any kind used at a site where operations began in 1916 and ceased in 1976, some 10 to 70 years before Tierra came into existence.

Tierra objects to the term "identify" as overbroad and unduly burdensome in that it requests personal information of individuals identified in response to the USEPA Request, which information is private and bears no rational relation to USEPA's inquiry.

RESPONSES TO REQUESTS FOR INFORMATION

1.
 - a) State the correct name and mailing address of the Company.
 - b) State the name and address of the president, chief executive officer or the chairman of the board, or other presiding officer of the Company.
 - c) Identify the state of incorporation of Company and its agent for service of process in the state of incorporation and in New Jersey.
 - d) If the Company is a subsidiary or affiliate of another company, or has subsidiaries, or is a successor to another company, identify these related companies. For each related company, describe the relationship to the Company and indicate the date and manner in which each relationship was established.
 - e) How many employees does the Company have?

RESPONSE:

- a) Tierra Solutions, Inc.
Two Tower Center Boulevard
Floor 10
East Brunswick, NJ 08816
- b) Mr. David Rabbe is the President of Tierra.
- c) Tierra is a Delaware Corporation. Its agent for service of process in the State of Delaware is The Prentice-Hall Corporation System, Inc. Its agent for service of process in the State of New Jersey is Corporation Service Company.
- d) Tierra objects to this question as overbroad and not likely to lead to information relevant to USEPA's inquiry. Tierra further objects to the extent USEPA failed to define the term "affiliate." Subject to and without waiver of these objections, Tierra is a subsidiary of another company, but has no subsidiaries of its own. Specifically, as noted above, Tierra is a former Maxus subsidiary. In approximately 1995, Maxus was acquired by YPF, S.A., an Argentina corporation. In 1996, as part of a corporate reorganization, YPF Holdings, Inc., was created as a subsidiary of YPF International, Inc., itself created in 1996 as a subsidiary of

YPF, S.A.. YPF Holdings, Inc., became the direct parent of Maxus, and CLH Holdings, Inc. was created as another subsidiary of YPF Holdings, to hold the stock of Tierra. Thus, Tierra is a subsidiary of CLH Holdings, which is Maxus's sister corporation.

- e) Tierra currently has six (6) full-time employees.
2. Describe in detail the Company's relationship with the entity known as Diamond Shamrock Chemicals Company:
- a) was the Company a subsidiary or division of the entity;
 - b) is the Company a corporate successor to the entity; and
 - c) has the Company assumed any liability or liabilities of the entity, or agreed to defend or indemnify, or otherwise in any way become responsible for any liabilities or obligations of the entity, either actual or potential.

RESPONSE: Tierra's relationship to Diamond Shamrock Chemicals Company ("DSCC") is described in detail in the Background section above. As discussed in further detail therein, Tierra and DSCC were for a brief period of approximately 6 months members of the same corporate family, but that relationship terminated upon the sale of all of DSCC's stock to OCC. Tierra also responds as follows to the specific sub-parts of this question:

- a) No. By way of further response, at one point DSCC and Tierra were subsidiaries of the same parent corporation, as described above.
- b) No.
- c) Tierra objects to this question as overbroad and not likely to lead to information relevant to USEPA's inquiry. Subject to and without waiver of these objections, Tierra did not agree to defend or indemnify DSCC, and is not otherwise responsible to USEPA for DSCC's liabilities or other obligations, whether actual or potential. However, as described above, upon Maxus's sale of DSCC, Maxus agreed to certain indemnity obligations, which obligations Tierra is overseeing under a separate agreement between Maxus and Tierra.

3. Provide copies of all documents pertaining to any transactions between the Company and the entities referred to in Question 2.

RESPONSE: Tierra objects to this question as overbroad and not likely to lead to information relevant to USEPA's inquiry. Tierra further objects to the extent USEPA failed to define the term "transaction." Subject to and without waiver of these objections, a copy of the documents reflecting the transfer of title to the Diamond Site from DSCC to Tierra is enclosed in Box 3 of 3. Also enclosed is a copy of the April 17, 1990 Administrative Consent Order, signed by OCC, as successor to DSCC, and Tierra. See Appendix, Exh. B.

4. Describe the transaction by which the Company acquired ownership of all or part of the property that bounds the Standard Chlorine Site to the north, also known as the Diamond Shamrock site, and provide copies of all documents relating to the transaction.

RESPONSE: See Tierra's objections and response to question no. 3 above, the documents referenced therein, and Section A of the Background section above.

5. If the Company operated on any parcels comprising part of the Site property, identify those parcels, the owner of the parcels, and the terms of any agreements allowing the Company to operate on those parcels. Provide copies of any such agreements in the Company's possession.

RESPONSE: Tierra objects to this question to the extent USEPA failed to define the term "operated." Assuming USEPA is inquiring as to any manufacturing or related operations that may have been conducted at the Standard Chlorine Site by Tierra, as opposed to environmental response activities at the Standard Chlorine Site that may have been performed by Tierra, Tierra responds as follows: None. Tierra is aware that prior owners of the Diamond Site could potentially have conducted limited, non-manufacturing operations at the Standard Chlorine Site. A July 9, 1962 Deed contained in the title documents for the Standard Chlorine Site, copies of which are enclosed in Box 3 of 3, identifies a December 31, 1953 agreement creating a common easement along a common property line between Diamond Alkali Company and Koppers Company, Inc., the former owner of the Standard Chlorine Site. The July 9, 1962 Deed also identifies an April 14, 1959 lease between Diamond Alkali and Koppers "for the lease of a concrete and metal building, known as Building No. 5, for warehouse purposes...." Information provided verbally by Margaret Kelly of SCCC suggests such purposes were for storage of finished product. Tierra is unaware of any evidence that suggests the extent to which any former owner of the Diamond Site "operated" at the Standard Chlorine Site pursuant to the

easement or lease, or any other evidence of any other potential operations at the Standard Chlorine Site.

6. Describe in detail the operations and processes that the Company conducted at the Diamond Shamrock Site. Provide copies of any documents relied upon to respond to this question.

RESPONSE: Tierra objects to this question to the extent USEPA failed to define the terms “operations” and “processes.” This question is also overbroad given the timing and nature of Tierra’s activities at the Diamond Site. Tierra is conducting and has conducted in the past environmental response activities at the Diamond Site, including activities being performed in connection with the 1990 ACO. Thus, assuming USEPA is inquiring as to any manufacturing or related operations or processes that may have been conducted at the Diamond Site by Tierra, as opposed to environmental response activities that may have been performed by Tierra, Tierra responds as follows: None. However, during the course of Tierra’s environmental response activities pursuant to the 1990 ACO, Tierra has obtained information regarding the manufacturing operations and processes conducted by prior owners of the Diamond Site which is described below.

Between approximately 1916 and 1949, The Martin Dennis Company conducted operations at the Diamond Site. In or around 1949, the Diamond Alkali Company acquired the stock and assets of The Martin Dennis Company, including the Diamond Site property. Through a series of name changes, Diamond Alkali became DSCC, which continued operations at the Diamond Site until approximately 1976, when all manufacturing operations at the Diamond Site ceased. The principal product manufactured at the Diamond Site was sodium bichromate, which was manufactured from approximately 1916 until 1971. Additionally, other products manufactured at the Diamond Site include chromic acid (1952-1955), Tanolins (1952-1976) and CPA-1800 (a chromic acid additive) (1960-unknown). Additional information relating to the products manufactured at the Diamond Site is contained in the Diamond RIWP.

The sodium bichromate production process utilized at the Diamond Site used chromite ore shipped to the site from foreign mines. The ore was crushed, dried and pulverized, then mixed with various raw materials, including ground limestone, soda ash, and recycle residue, the ratio of which mixture varied over time. The mixture was then roasted, which oxidized the trivalent chromium contained in the ore. The roasting was conducted using furnaces, which furnaces varied over time as efforts were made to increase efficiency. Reverberatory furnaces were used until approximately 1945 when “dome” or “bell” type furnaces were used. The use of “dome” or “bell” type furnaces occurred during a period of time when the United States government directed operations at the Diamond Site. Specifically, the United States, through its War Production Board,

Chemical Division, leased the property and purchased equipment for its own use.⁵ Due to problems with the bell furnaces, after the Diamond entities acquired the Diamond Site in 1949, rotary kilns were used.

After being roasted, the mixture was then crushed and leached, resulting in a sodium chromate liquor and a residue. A portion of the residue resulting from the leaching was returned to the ovens (again, the ovens used for roasting were changed over time; after 1949 rotary kilns were used). The liquor was neutralized with sulfuric acid, filtered to remove alumina hydrate byproduct and concentrated through evaporation, after which further addition of sulfuric acid converted the chromate to bichromate with a sodium sulfate byproduct. The sodium sulfate was removed, and the sodium bichromate solution was either shipped as a liquid or was evaporated, crystallized and dried to form a granular product.

This sodium bichromate production process resulted in COPR. COPR produced during the production process was captured in a "hopper" and was moved around on and/or removed from the Diamond Site by various third-party contractors, including James R. Radigan (late-1950s through early-1960s), Disch Construction, Inc. (1963 through 1976), and Arden Chemical (for approximately a two-year period in the mid-1960s). The COPR was handled by persons or entities that were not controlled by DSCC or its predecessors, and therefore the ultimate use of the material, the identity of the customers, drivers, facilities or businesses that ultimately obtained the waste, and the dates or amounts involved is information within the knowledge of such persons. However, given the Standard Chlorine Site's proximity to the Diamond Site, it has been assumed by various enforcement authorities that COPR used as fill at the Standard Chlorine Site originated at the Diamond Site.

The sodium bichromate production process also created two byproducts, alumina hydrate and sodium sulfate. Sodium sulfate was sold to paper manufacturers. The alumina hydrate was sold as a product to a single customer that used it for water treatment purposes. In the late 1960s, when the company lost its only customer for the alumina hydrate byproduct and was unable to find other outlets, the alumina hydrate byproduct was stored on the northern part of the Diamond Site. It remained there until approximately 1971, after which it was disposed of in a manner proscribed by the NJDEP, which ultimately consisted of on-site treatment. A further description of

⁵ In or around December 2004, Tierra and the United States entered into a Settlement Agreement under which the United States reimbursed Tierra for a share of past COPR-related costs and pays a designated percentage of ongoing response costs, including in regard to the Standard Chlorine Site, due to the United States' having assumed operational control of the adjacent Diamond Site during the war years in the mid-1900s.

DSCC's response to the NJDEP's oversight regarding the alumina hydrate pile at the Diamond Site is contained in response to question no. 9 below.

In addition to the Diamond RIWP, information contained in this response was obtained from a selection of documents that are contained in approximately 11,000 pages of materials compiled by Maxus in the late-1980s. These documents were produced in response to an Administrative Subpoena issued by the NJDEP to Maxus and OCC, to which Maxus responded on behalf of itself and OCC (the "Administrative Subpoena documents"). Those documents within the Administrative Subpoena documents that were consulted in response to the USEPA Request, and which Tierra believes are relevant to the USEPA Request, are enclosed with this response along with a copy of the Administrative Subpoena. See Box 3 of 3. The remaining documents are available for inspection upon request. Specific documents within the Administrative Subpoena documents to which Tierra referred in formulating its response to this specific question include pages 00494-00501, 01349-01351, 01358-01362, 01374-01378 and 01457-01483.

7. Provide a list of chemicals, including hazardous substances, hazardous wastes and industrial waste materials, used, stored, generated or handled at the Diamond Shamrock Site during the entire time that the Company owned and/or operated at the Diamond Shamrock Site. Describe the use of each of the chemicals identified, estimate quantities used on an annual basis and provide the sources of these chemicals at that time. Provide copies of any documents used to prepare the list.

RESPONSE: Tierra objects to this question as overbroad given the timing and nature of Tierra's activities at the Diamond Site. Tierra is conducting and has conducted in the past environmental response activities at the Diamond Site, including activities being performed in connection with the 1990 ACO, and to implement interim remedial measures. It never engaged in any manufacturing or industrial activities at the Diamond Site, the Standard Chlorine Site, or any other site, much less any that resulted in any discharges. By way of separate response, Tierra also notes that in the course of its response activities, various products are used, stored and handled by Tierra at the Diamond Site in connection with remedial measures implemented at the ACO Sites with approval of NJDEP and consistent with intended purposes of such materials. Such products include materials used for treatment of COPR (Ascorbic Acid (Vitamin C), and Ferrous Sulfate), as well as Hepure HC-15 powder, an iron powder, each of which were stored at the Diamond Site and used at select ACO Sites, but were only used at the Diamond Site as part of COPR treatability studies. In addition, Roundup Weathermax (a commercial grade herbicide), PCF 100 and Driveway Sealer (asphalt and cold sealants) and Geo-Tac and Pave Prep (petroleum asphalts) were used at the Diamond Site and Standard Chlorine Site as part of maintenance for Interim Remedial Measures in place there. A chart listing the quantities used and sources, if known, of these products is

enclosed herewith. See Appendix, Exh. I. As to the chemicals used, stored, generated or handled at the Diamond Site prior to 1976 (when industrial activities at the Diamond Site ceased), the excerpts from the Diamond RIWP contain information regarding the nature, use, and quantities of chemicals used at the Diamond Site. Additional information is contained in the Administrative Subpoena documents (see, e.g., pages 00611-00628 and 00750-00753).

8. Describe how chromite ore processing residue or other hazardous substances, hazardous wastes or industrial waste materials from the Diamond Shamrock Site came to be present at the Site. Include in your response the locations at which the hazardous substances, hazardous wastes or industrial waste materials used, stored, generated or handled at the Diamond Shamrock Site by the Company were disposed of; the dates of disposal; condition of material being disposed of (e.g., solid, liquid, or sludge); and whether materials were containerized.

RESPONSE: Tierra objects to this request to the extent it characterizes COPR at the Standard Chlorine Site, which may or may not have originated at the Diamond Site, as a hazardous substance. Holding aside issues relating to COPR which are addressed separately below, there is no indication that any hazardous substances from the Diamond Site came to be present at the Standard Chlorine Site. As to the presence of COPR at the Standard Chlorine Site, and without waiver of the foregoing objection, a nexus between the Diamond Site and the COPR used as fill at the Standard Chlorine Site has been assumed by various enforcement authorities given the proximity of the two properties to one another. Evidence as to how COPR from the Diamond Site may have come to be present at the Standard Chlorine Site is unavailable, given the amount of time that has expired since operations were conducted at the Diamond Site that resulted in the production of COPR. However, the Standard Chlorine RIWP contains general information regarding the filling of the property.

Upon information and belief, the Standard Chlorine RIWP is based, in part, on hearsay information contained in a memorandum located in the Administrative Subpoena documents (page 005493) referencing claims by a former Plant Manager at the Standard Chlorine Site, Milton Davis. Mr. Davis surmises that the Standard Chlorine Site was filled with COPR from the Diamond Site sometime prior to 1961 when Standard Chlorine took ownership of the Standard Chlorine Site. Thus, the time period referenced by Mr. Davis appears to have preceded Mr. Davis's tenure as an employee at the Standard Chlorine Site, and the basis for Mr. Davis's claim is unknown. Similarly, a former DSCC employee, Al Sebian, testified at a deposition that Standard Chlorine's predecessor in title, Koppers Company, Inc., was one of the neighboring property owners that used COPR as sub-fill and laid concrete on top of it, but the source of Mr. Sebian's information is unknown. A copy of Mr. Sebian's deposition transcript is contained in the Administrative Subpoena documents, at pages 000006 to 000050. Mr. Sebian's

testimony is also part of a larger collection of deposition transcripts from various litigations involving the production and use of COPR in Hudson County, referenced more fully in response to question 14.

Notwithstanding the unreliable and speculative nature of the evidence purportedly supporting the claim that COPR from the Diamond Site was disposed of at the Standard Chlorine Site, Tierra and OCC, without admitting liability, entered into the 1990 ACO, and thus agreed to perform remediation and investigation of COPR at the Standard Chlorine Site and are doing so. Accordingly, how COPR came to be present at the Standard Chlorine Site, and whether it in fact originated at the Diamond Site, is irrelevant.

9. For process waste waters generated at the Diamond Shamrock Site, provide the following information:
- a) Where was the waste water discharged and during what years?
 - b) If any waste waters were discharged into a sanitary sewer, during what years did these discharges occur?
 - c) If any waste waters were not discharged to the sanitary sewer, where were they discharged or disposed of, and during what years?
 - d) Describe any treatment of waste waters prior to being discharged to the sanitary sewer, or elsewhere, or otherwise disposed of. Please be specific.
 - e) Please provide the results of any analyses performed on any waste process streams generated at the facility.

RESPONSE: Specific information as to process waste water generated at the Diamond Site is largely unavailable, given the amount of time since production operations at the Diamond Site ceased. All available information concerning waste water and discharges from the Diamond Site, if any, has already been utilized to identify areas of concern and formulate the responsive action taken at the Diamond Site, as described in the Diamond RIWP, the IRAW, and other remedial investigation documents described in the Background section above and being provided or made available in response to the USEPA Request. Moreover, investigations implemented under the 1990 ACO have delineated the extent of the effects of any relevant discharges. However, based on available information, Tierra responds to the specific sub-parts of this question with respect to DSCC operations as follows:

- a) The location and dates of discharge of wastewater is largely unknown. Some information is contained in the Diamond RIWP

and the Administrative Subpoena documents, which identifies, among other discharges for which specific information is unavailable, alumina hydrate leachate threatening the Dead Horse Creek, which traversed the Diamond Site toward the Hackensack River. This issue arose, as noted above, in the late 1960s when DSCC was unable to find customers for the alumina hydrate, and the alumina hydrate byproduct was stored on the northern part of the Diamond Site. The New Jersey Department of Health began an inquiry in the late-1960s in connection with the alumina hydrate stored at the Diamond Site, which inquiry NJDEP continued after its formation in 1970 and was ultimately resolved by a consent judgment that related to discharges of runoff from the alumina hydrate pile, as described in the Diamond RIWP and Administrative Subpoena documents.

DSCC took numerous actions as part of its consent judgment with NJDEP. It constructed a dike to contain storm water runoff; it created a drainage ditch to provide a secondary settling basin; it created a settling pond; it implemented a daily sampling program pursuant to NJDEP protocol; and it ultimately bypassed the Dead Horse Creek flow through a 48 inch culvert, and filled in the creek, to prevent discharges into the Hackensack River. Information regarding these actions is contained in Table 6.113.1-1 of the Diamond RIWP, the Wehran Engineering documents (WE00009-WE00014),⁶ the October 2006 Interim Remedial Measures Work Plan for Stormwater Pipe at the Diamond Site described in the Background section above, and the Administrative Subpoena documents (see, e.g., pages 00370-00377, 00494-00501, 00759-00864, 05511-05512, 01620-01674, 01678-01692 and 03210-03212).⁷

⁶ The Wehren Engineering documents are a collection of documents produced by an engineer that had performed work at the Diamond Site in connection with the filling in of the Dead Horse Creek and the project performed as part of the consent judgment with NJDEP regarding the alumina hydrate pile. These documents were produced in response to a subpoena by an unrelated entity that engaged in operations in Hudson County that resulted in the production of COPR, in an action concerning the presence of COPR at a site other than the Standard Chlorine Site, and are enclosed in Box 3 of 3.

⁷ Additional documents regarding the alumina hydrate issue are contained in the Administrative Subpoena documents, at pages 00054-00055, 00134-00136, 00138-00143, 00146-0014700224-00225, 00228, 00230-00243, 00276-00287, 00308-00359,

- b) Tierra is unaware of the timeframe for discharges into a sanitary sewer at the Diamond Site. All known information concerning such discharges is contained in the Wehran Engineering documents (see WE000534-WE000538) and the Administrative Subpoena documents (see, e.g., pages 01445-01450 and 01468-01474).
- c) Tierra is unaware of the timeframe for discharges of waste water that were not into a sanitary sewer at the Diamond Site. All known information concerning such discharges, if any, is contained in the Wehran Engineering documents (see WE000534-WE000538) or the Administrative Subpoena documents.
- d) The only information available regarding the treatment of wastewater is a reference in the Administrative Subpoena documents to process wastewater being subject to anaerobic treatment, as explained in the Administrative Subpoena documents (see, e.g., pages 01468-01474), and the Wehran Engineering documents (see WE000534-WE000538).
- e) Information regarding analyses of waste water streams at the Diamond Site during the period of its operation is limited to available information in the Wehran Engineering documents (see WE000534-WE000538) and the Administrative Subpoena documents (see, e.g., pages 00554-00564, 01468-01474, 01544-01554, 06292-06296 and 01701-01857).

10. For floor drains or other disposal drains at the Company's location:

- a) Did the drains connect to a sanitary sewer and if so, during what years?
- b) If the floor drains or other disposal drains at the Company's location did not discharge to the sanitary sewer, where did they discharge and during what years?

00370-00390, 00401-00402, 00424, 00476, 00482, 00877-0046, 00964-00985, 00997-00999, 01000-01101, 01418-01420, 01457-01483, 05511-05512, 05530-05534, 05642-05644, 11072-11094, and 11114-11121. Also included in the Administrative Subpoena documents are pleadings in the lawsuit styled NJDEP v. Diamond Shamrock Corporation, New Jersey Superior Court, Chancery Division, Docket no. C-2836-71, at pages 04889-04990, 10990, 11000-11032 and 11037-11056.

- c) Did any storm sewers, catch basins or lagoons exist at any time at the location and if so, during what years?
 - i) Were the catch basins or lagoons lined or un-lined?
 - ii) What was stored in the lagoons?
 - iii) What was the ultimate discharge point for the storm sewers, catch basins or lagoons?
 - iv) During what years was the Company discharging from any of these structures?
 - v) Were these discharges treated before release and if so, how and during what years?
 - vi) What was the chemical composition of any waste waters discharged from any of these structures?
- d) Provide diagrams of any waste water collection, transport, storage, treatment or disposal systems on the property.

RESPONSE: See Tierra's response to question no. 9 above, and the documents referenced therein. By way of further response, Tierra responds to the specific sub-parts of this question with respect to DSCC operations as follows:

- a) Tierra lacks information concerning drains at the Diamond Site.
 - b) Tierra lacks information concerning drains at the Diamond Site.
 - c) Any available information responsive to this sub-part is contained in the documents referenced in Tierra's response to question no. 9 above.
 - d) Information regarding waste water systems on the property is contained in the Wehran Engineering documents (see WE000534-WE000538) and the Administrative Subpoena documents (see, e.g., 01468-01474 and 06292-06296).
11. Identify any industrial waste materials that were disposed of in or discharged to the Hackensack River, including its tributaries. Estimate the amount of the industrial waste materials disposed of in or discharged to the Hackensack River, including its tributaries, and the frequency with which this disposal or discharge

occurred. Also please include any sampling of the river which you might have done after any discharge or disposal.

RESPONSE: Tierra objects to this question as overbroad, vague, and burdensome. Tierra also objects to the extent it fails to identify whether USEPA is inquiring as to waste materials emanating from the Diamond Site or the Standard Chlorine Site, or otherwise. Tierra also objects to this question as overbroad given the timing and nature of Tierra's activities at the Diamond Site and the Standard Chlorine Site. Tierra is conducting and has conducted in the past environmental response activities at the Diamond Site and the Standard Chlorine Site, including activities being performed in connection with the 1990 ACO, and to implement interim remedial measures. Thus, to the extent USEPA is inquiring as to industrial waste materials that were disposed of in or discharged to the Hackensack River as a result of Tierra's activities at either the Diamond Site or the Standard Chlorine Site, Tierra responds as follows: None. Subject to and without waiver of these objections, Tierra responds as follows: See Tierra's response to question 9 above, and the documents referenced therein. By way of further response, Tierra notes that the Hackensack River has been the focus of certain investigations and studies conducted by Tierra and the PRG. Impacts from chromium to near shore sediment were evaluated by Tierra as part of the RI activities for the site and the results are presented in the Revised Remedial Investigation Report, Site 113 (Diamond Site) dated June 2008, a copy of which is enclosed in Box 2 of 3. The studies completed include the collection and analysis of sediment grab samples and pore-water samples. In addition, sediment toxicity testing was performed. While elevated concentrations of total chromium were found in the near-shore sediment, the studies indicate that chromium in sediments has limited bioavailability and no strong relationship with sediment toxicity. The pore-water results show that hexavalent chromium is not present in measurable concentrations in the pore-water of the sediment and total chromium is present at extremely low concentrations, (a maximum of 5.3 ppb). It is also worth noting that despite the limited chromium impacts to near-shore sediment, it is anticipated that remedial measures will be implemented as part of the NJDEP-approved IRAW/Non-time critical removal action. The plan in that regard is that a barrier wall system will be installed along the shoreline and the near-shore sediment will be removed and consolidated on-site. A Hackensack River investigation was also performed by the PRG at the request of NJDEP and under NJDEP oversight for the purpose of evaluating the potential impact of contaminants from the Diamond, Standard Chlorine and Koppers Sites. The investigation focused on the collection of sediment samples from a 2.7 mile stretch of the River extending from approximately 1/4 mile upstream of the New Jersey Turnpike Bridge (Eastern Spur) to 1/4 mile downstream of the Wittpenn Bridge. This corresponds to 1/2 mile north of the Diamond Site and 1/2 mile south of the Koppers Site. Samples were collected from sediment cores and select mudflats for analysis that included a comprehensive list of parameters. With respect to total chromium, concentrations were generally consistent with what would be expected in an urban river (most less than 300 mg/kg, maximum of 1,170 mg/kg). Hexavalent chromium was

encountered sporadically and at low concentrations (maximum 19 mg/kg) in the study area. These detections of hexavalent chromium were generally inconsistent with the oxidation-reduction chemistry of the samples which in most if not all cases indicated that hexavalent chromium cannot be sustained in the sediment. Therefore, it is likely that the detections are a result of interferences or other analytical anomalies related to the complex sediment matrix. The results of this study are presented in the Hackensack River Study Area Remedial Investigation Report dated June 2007. See Appendix, Exh. F. Additional information responsive to this question, including sampling of the Hackensack River, is contained in the Remedial Investigation Work Plans, Remedial Investigation Reports, Interim Response Action Work Plan, and other reports being provided herewith, including the June 2008 Revised Remedial Investigation Report and River Study discussed above along with the Administrative Subpoena documents (pages 03216-03220, 04368-04385 and 09206-09209).

12. Identify any leaks, spills, explosions, fires or other incidents of accidental discharges that occurred at the Diamond Shamrock Site during or as a result of which any hazardous substances, hazardous wastes or industrial waste materials were released on the Site, into the waste water or storm drainage system at the facility or to the Hackensack River including its tributaries. Provide any documents or information relating to these incidents, including the ultimate disposal of any contaminated materials.

RESPONSE: See Tierra's response to question 9(a) above, and the documents referenced therein.

13. Was the Diamond Shamrock Site ever subject to flooding? If so, provide the date and duration of each flood event. Was the flooding due to:
 - a) overflow from sanitary or storm sewer back-up, and/or
 - b) flood overflow from the Hackensack River?

RESPONSE: Specific information at the requested level of detail as to flooding at the Diamond Site is unavailable, given the large amount of time that has expired since operations were conducted at the Diamond Site. However, limited information is available in the Diamond RIWP, as well as the Administrative Subpoena documents (see, e.g., pages 01005-01006, 01445-01450 and 01555-01556), which suggest localized flooding has occurred at the Diamond Site due to causes unknown. There is also a tidegate at the Diamond Site that is designed to prevent overflow from the Hackensack River into the storm sewer. However, it is known that in the post-1990 ACO period there have been isolated events of flooding observed by Tierra employees and contractors. But at this juncture there is an interim remedial measure at the Diamond Site to prevent

waters from the Hackensack River from coming into direct contact with soils at the Diamond Site that may contain contamination.

14. Describe any civil, criminal or administrative proceedings against your Company for violations of any local, State or federal laws or regulations relating to water pollution or hazardous waste generation, storage, transport or disposal at or from the Diamond Shamrock Site. Provide copies of all pleadings and depositions or other testimony given in these proceedings.

RESPONSE: Tierra objects to this question as overbroad and ambiguous, as USEPA fails to identify the type of action it considers an action "for violations of any local, State or Federal laws...." For example, it is unclear whether USEPA refers to actions for damages by owners of properties containing COPR in Hudson County, which owners may assert claims under various laws such as the common law, Spill Act or other environmental statutes, or whether USEPA intends to limit this request to actions by any public entity for violations of any local, State or Federal laws or regulations. Subject to the foregoing objections, Tierra has not had any civil, criminal or administrative proceedings against it for violations of any local, State or Federal laws or regulations relating to water pollution or hazardous waste generation, storage, transport or disposal at or from the Diamond Site that are relevant to the USEPA Request. However, while Tierra would not consider it an action "for violations of any local, State or Federal Law...", Tierra (then Chemical Land Holdings) was named in the action styled Standard Chlorine Chemical Corp. v. Occidental Chemical Corporation, et. al., United States District Court for the District of New Jersey, Docket No. 90-2209, which case was resolved prior to filing any answer. Copies of the complaint in that action, as well as the Agreement for Chromite Ore-Related Interim Remedial Measures, are enclosed herewith (See Appendix, Exh. J), but the relief sought in that action was rendered moot due to the Standard Chlorine Site's inclusion under the 1990 ACO. In the interest of full disclosure, and irrespective of whether Tierra has been named, there have also been a number of actions involving allegations relating to the manufacturing operations at one or more of the facilities where COPR was produced in Hudson County, including in some instances the Diamond Site, as follows:

Case Name	Docket No.
Bentey v. PPG, et al.	HUD-L-2574-94
Exxon v. PPG, et al.	W-001301-90
Hoffman v. Totaro v. Jersey City, et al.	HUD-L-969-90
Jana Corporation v. OCC	HUD-L-4727-91
Kitsos v. Allied Signal	HUD-L-10510-97
NJTA v. PPG, et al.	93-2037 (JWB); 98-6309 on appeal
NJDEP v. Diamond Shamrock Corp.	HUD-C-2836-71

Case Name	Docket No.
NJDEP v. Honeywell International, Inc., et al.	HUD-C-77-05
PPG v. Lawrence Construction	HUD-L-195-93
Route 440 Vehicle Corp. v. Nicholas v. Travelers, et al	86-5046 (DNJ)
Scottsdale Ins. Co. v. Totaro	HUD-L-7179
Secaucus v. McKay Bros. Landfill	C-2602-71
Settle v. PPG, et al.	HUD-L-10652-92
Trum v. Allied Signal	W-14248-89
Statewide Recycling v. PPG, et al.	HUD-L-7428-95

Pleadings in these cases are available upon request. In addition, an index of the deponents from various lawsuits filed in connection with COPR production and use in Hudson County, and the cases in which they were deposed, is attached hereto. See Appendix, Exh. K. The transcripts of the depositions on the attached index are contained in approximately 40 linear feet of files, along with pleadings from many of those cases contained in approximately 16 linear feet of files (which would comprise a total of approximately 50 boxes of material), and are available upon request. The Diamond RIWP also provides a listing of enforcement actions brought against the prior operators of the Diamond Site.

15. Provide the names and addresses of any entities other than the Company of which you are aware that may have released or disposed of any material at the Site. Include in your response a description of the types of waste and the dates of disposal.

RESPONSE: Tierra objects to this question to the extent it suggests that Tierra may have released or disposed of any material at the Standard Chlorine Site. As set forth above, Tierra never engaged in any activities that would have resulted in the release or disposal of any material at the Standard Chlorine Site. Subject to and without waiver of the foregoing objections, Tierra responds as follows: Any entity that appears as an owner or operator in the chain of title for the Standard Chlorine Site, as reflected in the title documents enclosed herewith, is a potentially responsible party for the contamination at the Standard Chlorine Site. Additional potentially responsible parties are identified in a report Tierra provided on June 29, 2001 to NJDEP, entitled "Information Regarding Potential Responsible Parties for Site 116 (Standard Chlorine)." A copy of that report is enclosed in Box 1 of 3. Further, as noted in response to question no. 6, above, the United States operated the Diamond Site for a period under auspices of the War Production Board and to the extent the Diamond Site is deemed to give rise to liability for conditions at the Standard Chlorine Site, the United States is appropriately identified as a potentially responsible party for the Standard Chlorine Site. Indeed, in or around December 2004, Tierra and the United States entered into a Settlement Agreement under which the United

States reimbursed Tierra for a share of past COPR-related costs is designated to pay a percentage of ongoing response costs, including in regard to the Standard Chlorine Site, due to the United States' having assumed operational control of the adjacent Diamond Site during the war years in the mid-1900s. Further, potentially responsible parties may be identified in the Remedial Investigation Work Plans for the Diamond Site and the Standard Chlorine Site, as well as the other remediation documents enclosed herewith. The identity of potentially responsible parties is also being explored separately in a cooperative effort by the PRG and the USEPA. That effort is being conducted on behalf of the PRG by Margaret Kelly of SCCC, based on documents and information in SCCC's possession and control, and with regard to which SCCC will be in direct contact with USEPA.

16. Identify all persons who arranged for and managed the processing, treatment, storage and disposal of industrial waste or any materials containing hazardous substances.

RESPONSE: Tierra objects to this question as overbroad, vague, and ambiguous. This request fails to specify whether USEPA is seeking information regarding the Diamond Site or the Standard Chlorine Site, or otherwise. It also fails to specify whether the USEPA is seeking the identity of entities or persons that disposed of materials at, as opposed to from, those sites. Assuming USEPA is seeking the identity of any persons who arranged for and managed the processing, treatment, storage and disposal of industrial waste or any materials containing hazardous substances at the Standard Chlorine Site, see Tierra's response to question no. 15 above, as well as the Standard Chlorine RIWP.

17. If any of the documents solicited in this Request for Information are no longer available, please indicate the reason why they are no longer available. Please also provide:
- a) the Company's document retention policy;
 - b) a description of the type of information that would have been contained in the documents;
 - c) the name, job title and most current address known by you of the person(s) who would have produced these documents, the person(s) who would have been responsible for the retention of these documents; the person(s) who would have been responsible for the destruction of these documents; and the person(s) who had and/or still may have the originals or copies of these documents;

- d) the names and most current address of any person(s) who may possess documents relevant to this inquiry.

RESPONSE: Tierra is unaware of any specific documents or collections of documents solicited in the USEPA Request that are no longer available. Tierra responds as follows to the specific sub-parts of this question:

- a) As the focus of USEPA's Request is contamination caused by operations at the Diamond Site and/or the Standard Chlorine Site, given Tierra's role at those properties, Tierra's document retention policy is irrelevant. However, Tierra has and continues to comply with any relevant document retention requirements contained in the 1990 ACO, and continues to maintain files collected in response to NJDEP's enforcement efforts culminating in the 1990 ACO in connection with historic operations at the Diamond Site.
 - b) As Tierra is unaware of any specific documents or collections of documents solicited in the USEPA Request that are no longer available, it is unable to respond to this sub-part.
 - c) As Tierra is unaware of any specific documents or collections of documents solicited in the USEPA Request that are no longer available, it is unable to respond to this sub-part.
 - d) As Tierra is unaware of any specific documents or collections of documents solicited in the USEPA Request that are no longer available, it is unable to respond to this sub-part.
18. Provide copies of all insurance policies and indemnification agreements held or entered into by the Company that arguably could indemnify the Company against any liability that the Company may be found to have under CERCLA for releases and threatened releases of hazardous substances, pollutants, or contaminants at and from the Site. In response to this Question, please provide not only those insurance policies and agreements which currently are in effect, but also those which were in effect during the entire period of the Company's ownership or operation of the Site. For any policy that you cannot locate or obtain, provide the name of the carrier, years in effect, nature and extent of coverage, and any other information you have.

RESPONSE: Tierra objects to this question as vague and ambiguous. Tierra also objects to this question as it requires Tierra to speculate as to any policies or agreements that "arguably" would apply, and requires Tierra to undertake an analysis of contingent liability, which liability Tierra denies. While Tierra denies any liability for any releases

or threatened releases of hazardous substances, pollutants, or contaminants at or from the Standard Chlorine Site, Tierra is addressing COPR contamination at the Standard Chlorine Site on behalf of OCC pursuant to OCC's obligations under the 1990 ACO, and thus the question is irrelevant.

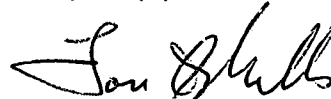
19. State the name, title, and address of each individual who assisted or was consulted in the preparation of the response to this "Request for Information" and specify the questions to which each person assisted in responding.

RESPONSE: The responses to the USEPA Request were prepared by counsel for Tierra, in consultation with Enrique Castro of Tierra by referring to documents that are being produced with this response and without personal knowledge of such events.

20. Identify all individuals (other than those identified in your response to Question 19) who may have information or documents relating to the subject of the USEPA Request for Information, and/or the generation, handling, storage, transportation or disposal of the hazardous substances, hazardous wastes or industrial waste materials that came to be located at the Site.

RESPONSE: Tierra objects to this question to the extent it requires Tierra to speculate as to knowledge or information in the possession of former Diamond Site owners, employees or other persons with whom Tierra has no relationship and over whom Tierra has no control. Subject to and without waiver of the foregoing objections, Tierra refers USEPA to the persons identified in the documents produced herewith relating to the generation, handling, storage, transportation or disposal of hazardous substances, hazardous wastes or industrial waste materials that came to be located at the Standard Chlorine Site or the topics therein (see, e.g., Administrative Subpoena documents at pages 05516-05517 and the persons identified on the index of deposition transcripts provided herewith (see Appendix, Exh. K)).

Very truly yours,



Lori A. Mills

cc: Leena Raut, Assistant Regional Counsel (via hand delivery, w/o encls.)

STATEMENT IN LIEU OF CERTIFICATION OF ANSWERS
TO REQUEST FOR INFORMATION

As set out in the General Objections above, it is Tierra's position that the provisions of CERCLA do not authorize and/or require that persons or entities responding to a 104(e) request provide a certification or affidavit with respect to such response. However, be assured that Tierra, in connection with preparation of the 104(e) responses set forth above, has undertaken a diligent inquiry to locate, review and assemble information in its possession, custody and control regarding the Diamond Site and the Standard Chlorine Site that is responsive to the USEPA Request. Tierra is also prepared to supplement this Response in the event that it uncovers additional responsive information.

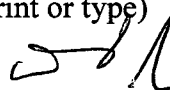
For Tierra Solutions, Inc.:

DAVID RABEK

NAME (print or type)

PRESIDENT

TITLE (print or type)



SIGNATURE